

Aventis CropScience



October 12, 2001

Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Subject: "Total Maximum Daily Load (TMDL) For the Pesticide Fipronil in the Mermentau Basin for the Following Subsegments: Bayou Plaquemine Brule (050201) Mermentau River (050401) Bayou Queue de Tortue (050501) Bayou Chene (050603) Including the 303(d) Listed Subsegment Bayou Des Cannes (050101)", US EPA Region 6, September 13, 2000.

Dear Ms. Caldwell:

Aventis CropScience submits herein comments on the subject document that proposes TMDLs for fipronil. As you know, Aventis is the registrant for fipronil, which is sold under the brand name ICON® for use on rice.

Inconsistent with the Clean Water Act

The proposed listing of a TMDL for a product that is fully registered by the EPA for application to water does not appear to be congruent with the intent of the CWA. Fipronil is registered as ICON® 6.2 FS for use as a rice seed treatment. The approved uses include the direct application of ICON-treated seed, and therefore fipronil, to water-flooded rice fields as a method of planting the seed and providing subsequent insect pest control in those fields. The proposed TMDLs for fipronil therefore appear to be inappropriate and inconsistent with the CWA NPDES permit program, which is intended to address point source discharges into waters of the U.S.

Priorities

Since there are more significant issues and materials for the Mermentau River Basin, Aventis CropScience questions the priority for the proposal of a TMDL for fipronil. Sedimentation and oxygen deficiencies are key and immediate problems identified for the system (LDAF, personal communication). In fact, it would appear that reductions in sediment runoff would directly reduce many or most nonpoint source introductions and have the largest impact upon water quality.

The establishment of a TMDL for fipronil in the Mermentau River Basin is at best premature

ICON fipronil rice seed treatment was first used in the area in 1999. As stated in the subject EPA report, new and specific management practices were implemented in 2000 to refine use of the product and to minimize perceived or alleged risks. The effects of these practices should be assessed over time. Also, the area underwent a drought for several years through 2000 and any introductions of any material into a

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<http://www.aventis.com>

Response:

Inconsistent with Clean Water Act: The CWA Section 303(d) mandates the development of TMDLs for waters that are not meeting designated uses. In this case, waters were listed due to "pesticides" which violates the Louisiana State WQS narrative "no toxics in toxic amounts". EPA believes it has the authority under federal regulations to establish a TMDL under these circumstances, for waters polluted only by non-point sources. See Pronsolino v. Marcos, 30 Env'tl. L. Rep. 20,460 (March 30, 2000).

Priorities: While DO and sedimentation are certainly important, EPA believes toxic pollutants in streams are just as important. Section 303(d) of the CWA mandates the development of a TMDL for impaired waters. Numerous waters were listed in the 1999 court ordered 303(d) list for pesticides in the Mermentau and Vermilion Teche Basins. Review of the available pesticide data for fipronil showed that water column concentrations often exceeded the established numeric target, and thus a TMDL for fipronil is required to satisfy the CWA.

Establishment of TMDL premature: This TMDL was developed within the time frame set by a court order. Additionally, the data support the development of the TMDL.

lower than normal flow situation would show unrealistic measurements compared to typical years. It is important to note that cultural practices in rice production are changing; therefore, the establishment of TMDLs for substances that are based upon previous target measurements are likely to be shown unnecessary. New developments in red rice control and other factors are expected to reduce the practice of rice flooding and therefore reduce the amount of water and sediment released from rice fields. It follows that EPA should establish a provision to delist TMDLs when they are no longer justifiable.

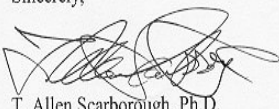
Correction

Aventis has determined that there is a mistake in the LC₅₀ value used in the document to derive the numeric targets for fipronil. In Appendix A (page 20) of the document, the representative Louisiana freshwater species listed is the bluegill sunfish, *Lepomis macrochirus*. The acute toxicity of fipronil to *L. macrochirus* is indicated in page 13, where a correct 96-h LC₅₀ of 83 µg/L is stated. However, the LC₅₀ value attributed to *L. macrochirus* in Appendix A (page 20) is 45.6 µg/L instead of the correct value of 83 µg/L. The source of the 45.6 µg/L value is presented in Appendix B-2 (page 33). There, the calculation of the numeric target for fipronil is based on an acute LC₅₀ of 45.6 µg/L for *Ceriodaphnia dubia*. Aventis is not aware of any study on the acute toxicity of fipronil to *C. dubia*. A recent search in the EPA's ECOTOX database (<http://www.epa.gov/ecotox/>) failed to find any toxicity data for fipronil and *C. dubia*. Unless the authors of the TMDL document have experimental data on the acute toxicity of fipronil to *C. dubia* from other reliable sources, Aventis believes that for the information proposed in the document, the correct toxicity value for deriving numeric targets is the 96-h LC₅₀ of 83 µg/L for *L. macrochirus*.

Aventis is aware that others have commented on the TMDL program rule and the NPDES rule and have made fundamental objection to the TMDL document based upon legal and regulatory objections. Rather than repeat those arguments, Aventis also joins in those objections and suggests that setting TMDLs for fipronil in these circumstances is premature, of questionable legality and a misuse of USEPA resources. Importantly, the inappropriate establishment of TMDLs has the potential to affect the availability of a limited number of critically important pest management tools.

Thank you for the opportunity to comment.

Sincerely,



T. Allen Scarborough, Ph.D.
Environmental Affairs
Aventis CropScience

Response:

Correction: The example calculation given in the appendix was not for fipronil, but an example of how the numeric targets were developed. EPA has revised the document to eliminate the confusion you expressed in your comment. The acute and chronic numeric targets established were based on the geometric mean of 45.6 ug/l. The geometric mean is calculated from two 96 hour LC50's for bluegill sun fish (25 ug/l and 83 ug/l) identified from the available data.

LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY

BOB ODOM, COMMISSIONER

W.G. "Bud" COURSON, DEPUTY COMMISSIONER



October 12, 2001

Ms. Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

RE: "Total Maximum Daily Load (TMDL) for the Pesticide Fipronil in the Mermentau River Basin and for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins.

Dear Ms. Caldwell:

The Louisiana Department of Agriculture and Forestry (LDAF) submits the following comments on the reference documents for proposing TMDL's under the Clean Water Act.

1. The proposed rules were not displayed on the Office of Pesticide Programs (OPP) web site which is traditionally viewed for upcoming regulations affecting pesticides. Although the proposed TMDL's are under the Clean Water Act, the pesticide registrants are accustomed to viewing the OPP web site as a point of notification, and until last week, the proper registrant personnel had not had the opportunity to view the proposed rule. LDAF recommends that all environmental regulations having such impact on the utilization of pesticides which are already approved for use under the Federal Insecticide and Rodenticide Act (FIFRA) through OPP be displayed on the OPP web site in addition to the water web site.
2. With consideration of comment number one, it is realized that the time in which to review and prepare comment has been minimized. LDAF recommends that not only the comment period be reopened, but that further communications take place between the region, LDAF, the Louisiana Department of Environmental Quality (LDEQ), and the registrants' environmental impact regulatory personnel for the impacted pesticide FIFRA labeled products. LDAF is extremely appreciative of the time and effort the region has made with the state agencies on the proposed rule and recommends another phase of that effort be allowed. Establishing chronic numeric targets on calculated values should yield to toxicological numbers when available from valid scientific data. With a complete review of all available product data in a pre-proposal exchange of communications with registrants, the resulting proposed rules may reflect a more probabilistic scientific approach.

Response:

1. EPA appreciates the comment and will take it into consideration for future pesticide TMDLs.

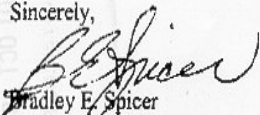
2. As requested by LDAF, EPA extended the comment period an additional 30 days to allow sufficient time for all interested parties to respond.

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3. Concern over the absence of stream rationalization of the sampling locations utilized in the collection of the LDAF water monitoring data creates question as to the adaptability of the data from some of the sampling locations to the Clean Water Act.
4. The issue of legal oversight by the Clean Water Act over the FIFRA product label approval process is overwhelming, and the current proposed rule creates tremendous precedence without establishing the format for interaction and exchange. With the magnitude of this precedence at hand, it is recommended that further resolve to the legal issues be reached and a formal format for interaction and exchange between the CWA and FIFRA through rule or law be established prior to setting such far reaching precedence which will carry over into other basins, states, and other FIFRA labeled pesticide products in the future.
5. In paragraphs 5.0 of each TMDL proposed reference is made, "...the commissioner to determine when the concentrations of pesticide wastes exceed promulgated federal or state standards..." After the words "pesticide wastes", add "and pesticides in water".

The issues expressed in these comments are crucial to both agriculture and the environment in Louisiana. This department will continue to assist the region and other state agencies in every manner possible to assure the most complete scientific approach is utilized in protecting these resources.

Sincerely,


Bradley E. Spicer
Assistant Commissioner

LL

cc: Bob Odom, Commissioner, LA Department of Agriculture and Forestry
Matthew Keppinger, Asst. Commissioner
Bobby Simoneaux, Director
Larry LeJeune, Asst. Director

Response:

3. EPA understands this to mean concern over the representativeness of the sampling station to the watershed. EPA used the best and only data available to develop the TMDL. EPA appreciates the comment and understands your concerns.
4. EPA appreciates the comment. A work group between Office of Water and Office of Pesticides is currently working to address this issue.
5. EPA has revised the TMDL to reflect this comment.

October 15, 2001

Ms. Ellen Caldwell
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave.
Dallas, TX 75202-2733

Dear Ms. Caldwell:

Subject: Proposed TMDL Listings for Louisiana's Mermentau
and Vermilion/Teche

River Basins
Comments: Proposed TMDL for the Pesticide
Carbofuran

FMC Corporation, Agricultural Products Group is herein submitting comments relative to proposed TMDL's for the pesticide carbofuran in the Mermentau River and Vermillion-Teche River Basins in response to the Federal Register notice published in Volume 66, No. 178 (September 13, 2001).

FMC has divided these comments into three areas: (1) Use of calculated numbers for establishing numeric target values vs. using actual testing result values (2) Monitoring Implications, and (3) Implications of test results on additional aquatic organisms. Specific comments for each of these areas are presented hereafter.

Response:

Use of Calculated Numbers for Establishing Numeric Target Values vs. Using Actual Test Values

Rather than using calculated chronic numeric target values for Ceriodaphnia, if actual chronic study values are available they should be used. FMC conducted a chronic Ceriodaphnia study in 1993, as a specific regulatory requirement by the state of California. The actual chronic no effect concentration for Ceriodaphnia in this GLP study is 0.16 ppb. Using this actual value of 0.16 ppb would categorize the Bayou Des Cannes as “fully supporting” since this chronic numeric target value was exceeded only once. Therefore, a TMDL is not warranted in the Bayou Des Cannes when the actual chronic study data is utilized. Additionally, use of the GLP conducted Ceriodaphnia results would mean that the number of monitoring detections that exceed numeric target values would only be 2 rather than 3 for the Mermentau River.

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Monitoring Implications

FMC believes that the establishment of a TMDL for carbofuran within Louisiana waterways is unwarranted based on available carbofuran monitoring data from the Louisiana Department of Agriculture and Forestry (LDAF) and the United States Geological Survey (USGS) that occurred from 1997 to 2000.

Response:

Use of Calculated Numbers...:For the pesticide carbofuran, EPA has not developed an Ambient Water Quality Criteria document. In accordance with the State of Louisiana’s codified regulations concerning the development of numeric water quality criteria to protect fish and wildlife propagation, found at L.A.C. Chapter 33 §1113. C.6. a. and b., these sections of the water quality standards regulations specify that the numeric criteria are primarily based on the EPA’s Water Quality Criteria “Books”; however, where EPA has not developed recommended criteria, §1113. C.6. b. requires that acute and chronic numeric criteria be established as an appropriate factor of the lowest LC₅₀ value for a representative Louisiana species. EPA conducted an extensive literature search within and outside of the Agency. Utilizing all the information collected, the lowest LC₅₀ value for a representative species was derived from the organism *Ceriodaphnia dubia* and based on a 48-hour acute toxicity test. EPA utilized application factors of 0.1 for acute criteria and 0.05 for chronic criteria, in accordance with the document submitted by the Louisiana Department of Environmental Quality to EPA Region 6 “*Documentation of Numerical Criteria for Acute and Chronic Aquatic Life Protection in the 1989 Water Quality Standards Revisions*”, dated June 1989. Louisiana has adopted and codified these regulations and EPA is compelled to utilize the State’s water quality standards regulations and established guidance. The cited regulations are shown below:

§1113. C.6. [Criteria]

a. Numerical criteria for specific toxic substances are mostly derived from the following publications of the Environmental Protection Agency: Water Quality Criteria, 1972 (commonly referred to as the "Blue Book"; Quality Criteria for Water, 1976 (commonly referred to as the "Red Book"; Ambient Water Quality Criteria, 1980 (EPA 440/5-80); Ambient Water Quality Criteria, 1984 (EPA 440/5-84-85); and Quality Criteria for Water, 1986 - with updates (commonly referred to as the "Gold Book"). Natural background conditions, however, are also considered. These toxic substances are selected for criteria development because of their known or suspected occurrence in Louisiana waters and potential threat to attainment of designated water uses.

. Of the numerous monitoring stations established by USGS and LDAF, only one location exceeded the chronic numeric target of 0.16 µg/L on more than one sampling occasion at the Mermentau River at Mermentau, LA (Station Number 08012150). In addition, out of the 32 sampling trips during the three-year period performed by USGS at Mermentau, only during two sampling events both occurring in June 1999 were levels of carbofuran in excess of the proposed TMDL. It is also unclear whether the June 1999 sampling is representative of overall water quality of the Mermentau when compared to June 2000 data since three years of monitoring data in June is not available at that location.

The document does not address the absence of detections observed at the numerous other monitoring sites conducted by USGS and LDAF. A complete review of the data would indicate that a TMDL is not needed based upon the vast majority of non-detections for carbofuran within the watershed. Since widespread carbofuran use and water quality monitoring is indicated in this report within the Mermentau basin by both USGS and LDAF, it is reasonable to conclude that the carbofuran uses have practically no impact on overall water quality within the basin.

Implications of test results on additional aquatic organisms

Ceriodaphnia appears to be unusually sensitive to carbofuran. Other aquatic organism studies should be taken into account. Other chronic studies using carbofuran and alternative freshwater species include: daphnia (NOEC = 9.8 ppb) and rainbow trout (early life stage NOEC = 24 ppb). These values are orders of magnitude above the *Ceriodaphnia* chronic values.

Response:

b. *The criteria for protection of aquatic life are based on acute and chronic concentrations in fresh and marine waters as specified in the EPA criteria documents and are developed primarily for attainment of the fish and wildlife propagation use. Where a specific numerical criterion is not derived in EPA criteria documents, a criterion is developed by applying an appropriate application factor for acute and chronic effects to the lowest LC50 value for a representative Louisiana species.*

Monitoring Implications: EPA appreciates your comments, however, regardless of whether the numeric target was 0.16 ug/l or 0.13 ug/l, it was still exceeded on more than one occasion. Following the assessment guidelines for toxicants, this water would still be assessed as partially supporting its uses and a TMDL is required under the CWA. See EPA Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement p. 3-18 (September 1997). Granular carbofuran was banned and is no longer being used for any crop, including rice. Although the granular form of carbofuran was banned, liquid and powdered forms are occasionally approved by LDAF for use on cotton and other crops.

The focus of the data evaluation is not on the number of non-detects, but on the number of times a numeric target or WQS is exceeded. Regardless of the number of non-detects, two or more exceedances in the numeric target during the most recent 3 year period would mean a TMDL is required for that particular pesticide.

Implications of test results: It is true that *Ceriodaphnia [dubia]* is more sensitive than either *Daphnia [magna, pulex]* or rainbow trout, to carbofuran. Toxicity data also indicates several other species are as, or more,

There are also acute values from numerous aquatic studies in the EPA's ECOTOX database. The table on the following page shows the results using the appropriate application factors (0.1 for acute criteria and 0.05 for chronic criteria) to calculate acute and chronic effect values. All of the calculated values in the table hereafter are orders of magnitude above any concentrations found in monitored Louisiana waters and would not require a TMDL.

Ms. Ellen Caldwell

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Species LC50	Conc. (ug/l) Level (ug/l)	Acute Numeric Level (ug/l)	Chronic Numeric Level (ug/l)
Rainbow trout	380	38	19
Coho salmon	530	53	26.5
Brown trout	560	56	28
Bluegill sunfish	88*	8.8	4.4
Channel catfish	248	24.8	12.4

*This value is from a study using technical material. In the FR Notice, Page 15, section 2.5; the 240 ug/l value is from a study using 50WP.

To summarize, FMC believes the information cited herein relative to the use of actual chronic study values for *Ceriodaphnia*, LDAF and USGS water monitoring results and test results on additional aquatic organisms demonstrate that the establishment of TMDL's for carbofuran are not currently warranted.

Response:

sensitive to carbofuran than *Ceriodaphnia dubia*. A European species of dragon fly, an Asian freshwater prawn, and an Asian freshwater crab demonstrated a comparable level of sensitivity, but are not representative of Louisiana fauna. EPA believes the limited number of tested North American species creates this perception of unusual sensitivity. However, *Ceriodaphnia dubia* is a well studied and documented species and for carbofuran it is the species that meets the requirements of 33L.A.C. 1113....

Should there be any questions relative to the information contained in these response comments please contact me (215-299-6436) (email address don_carlson@fmc.com).

Sincerely,

Don Carlson, PhD
Product Development and Registrations

cc: L. Lejeune, LDAF

Response:

October 10, 2001

Ms. Ellen Caldwell (6WQ)
Water Quality Protection Division
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

RE: Comments on TMDLs for Carbofuran and Fipronil in
Mermentau and Vermilion-Teche River Basins
Federal Register Notice September 13, 2001
Volume 66, No. 178

Dear Ms. Caldwell:

The Louisiana Department of Environmental Quality (LDEQ)
has reviewed the TMDLs prepared by Region 6 EPA for
Carbofuran and Fipronil in Mermentau and Vermilion-Teche
River Basins noticed in the September 13, 2001
Federal Register (Volume 66, Number 178).

The LDEQ's specific comments regarding this TMDL are
enclosed as an attachment.

If the EPA would like to confer with LDEQ regarding this
TMDL, arrangements can be made through Ms. Emelise
Cormier or Ms. Barbara Romanowsky of my staff.

Response:

Sincerely,

James H. Brent, Ph.D.
Assistant Secretary
Office of Environmental Assessment

Cc (w/ attachments):

Barbara Romanowsky, LDEQ/EED

J. Dale Givens, LDEQ

Emelise Cormier, LDEQ/ETD

Willie Lane, EPA

Sam Becker, EPA

Response:

LOUISIANA DEPARTMENT OF ENVIRONMENTAL
QUALITY

October 12, 2001

COMMENTS CONCERNING THE FOLLOWING
DOCUMENT:

TOTAL MAXIMUM DAILY LOAD (TMDL) For The Pesticide Carbofuran in the Mermentau River and Vermilion Teche River Basins Including the Following 303(d) listed segments: Bayou Petite Anse (060901), Bayou Des Cannes (050101), Grand Lake (050701), Intracoastal Waterway (050702), Mermentau River Basin Coastal Bays and Gulf Watersto State 3-mile limit (050901), Bayou Teche (060205), Bayou Des Glaises Diversion Channel (060207), Bayou Teche (060301), Bayou Teche (060401), Tete Bayou (060701), Vermilion River (060801), Vermilion River (060802), Vermilion River Cutoff (060803), Bayou Carlin (Delcambre Canal) (060902), Bayou Tigre (060903), New Iberia Southern Drainage Canal (060904), Intracoastal Waterway (060906), Franklin Canal (060907), Boston Canal and Associated Canals (060910), Dugas Canal by Tiger Lagoon Oil & Gas Field (060911), Bayou Petite Anse (061101), Intracoastal Waterway (061102); US EPA Region 6, September 13, 2000.

General Comments:

Response:

1. For the record LDEQ is concerned about EPA's continued use of a TMDL "endpoint" in the absence of a promulgated water quality criterion. While the methodology used for developing the endpoint is the methodology LDEQ uses for establishing water quality criteria, use of this number as the basis for a TMDL without promulgation is inappropriate and undoubtedly will not withstand a legal challenge. TMDLs have the potential to seriously impact both point and nonpoint sources. Therefore, criteria used in TMDLs as targets for load calculations should be developed and finalized as regulations following approved rulemaking procedures.

2. It is suggested that EPA notify the FMC facility in Opelousas because the TMDL directly impacts that facility.

3. Numerous typographical and grammatical errors were noted throughout the report.

Specific Comments:

Page ii, Title Page: The year needs to be changed to 2001.

Page 11, 2.2 Problem Statement, first sentence: Table 2 should be Table 3.

Pages 14-15, 2.4 Evaluating Pesticide Data, third, fourth and fifth paragraphs: EPA has provided data which actually shows that there are no Carbofuran exceedences in the Vermillion-Teche Basin and only two streams with exceedences in the Mermentau Basin. Only one of the two Mermentau streams was on the 303(d) list.

Response:

1. The TMDL is based on the State of Louisiana's narrative water quality standard "no toxics in toxic amounts". In order to evaluate the data and develop the TMDL, it was necessary to develop numeric targets or endpoints for pesticides used in the watershed that EPA believes to be protective of the narrative water quality standard.

2. EPA initially contacted this facility during the development of the TMDL. All persons with whom contact was made, in Opelousas and at the home office, were notified of the TMDL via email when it was released.

3. EPA appreciates the comment and has revised the TMDL as appropriate.

Page ii: Correction made.

Page 11: Correction made.

Pages 14-15: Due to the large number of subsegments listed for pesticides in the Mermentau and Vermillion Teche River Basins in the 1999 court-ordered 303(d) list, EPA believes a basin-wide approach is the most conservative and protective approach to developing this TMDL. Carbofuran exceeded the numeric target in several subsegments whose flow combines to form a major drainage for the Mermentau Basin headwaters. Although granular carbofuran is no longer used in rice farming, liquid and powdered forms

EPA's assertion that "spatial coverage of the data and the similarity in primary land use" is an adequate basis for developing TMDLs, is valid only if the data had actually shown that there was a problem associated with Carbofuran. While both basins have predominantly agricultural land use, the types of crops grown in the two basins are different. Rice is the main crop produced in the Mermentau Basin, and soybeans and other row crops are grown in Vermilion-Teche Basin. The coverage of the monitoring stations clearly shows that there is no water quality problem with Carbofuran in the vast majority of these two basins.

Page 17, 3.1 Current Load Evaluation, Table 4: The 7Q10 used for Bayou Teche at the Keystone Lock and Dam is out of date. The projection run for the Bayou Teche Watershed TMDL for Dissolved Oxygen (January 5, 2000), indicates a critical flow of approximately 309cfs.

Page 20, 3.2 TMDL, first paragraph: The percent reduction is calculated wrong, 52.7% should be 34.5%.

Page 20, section 3.3: Why is a WLA needed if the facility doesn't discharge Carbofuran? The report stated earlier that there is only sanitary and stormwater discharges. The WLA should be zero just like the Mermentau Basin.

Response:

are occasionally approved by LDAF for use on row crops. Therefore, EPA believes that because agriculture is the primary land use in both basins, it is appropriate to develop a basin-wide TMDL for carbofuran.

Page 17: EPA used the best available data; however, EPA appreciates the more recent data and has revised the TMDL to reflect this information.

Page 20: Correction made.

Page 20, 3.3: Per the NPDES permit, FMC is required to report the concentration of carbofuran in its discharge. The data from the DMR reports show that the concentration of carbofuran in the discharge greatly exceeds the numeric target.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL
QUALITY

October 12, 2001

COMMENTS CONCERNING THE FOLLOWING
DOCUMENT:

TOTAL MAXIMUM DAILY LOAD (TMDL) For the Pesticide Fipronil in the Mermentau Basin for the Following Subsegments: Bayou Plaquemine Brule (050201), Mermentau River (050401), Bayou Queue de Tortue (050501), Bayou Chene (050603), Including the 303(d) Listed Subsegment Bayou Des Cannes (050101); US EPA Region 6, September 13, 2000.

General Comments:

1. For the record LDEQ is concerned about EPA's continued use of a TMDL "endpoint" in the absence of a promulgated water quality criterion. While the methodology used for developing the endpoint is the methodology LDEQ uses for establishing water quality criteria, use of this number as the basis for a TMDL without promulgation is inappropriate and undoubtedly will not withstand a legal challenge. TMDLs have the potential to seriously impact both point and nonpoint sources. Therefore, criteria used in TMDLs as targets for load calculations should be developed and finalized as regulations following approved rulemaking procedures.

Response:

1. The TMDL is based on the State of Louisiana's narrative water quality standard "no toxics in toxic amounts". In order to evaluate the data and develop the TMDL, it was necessary to develop numeric targets or endpoints for pesticides used in the watershed that EPA believes to be protective of the narrative water quality standard.

2. Numerous typographical and grammatical errors were noted throughout the report. Misspellings and references to non-existent appendices were also found.

Specific Comments:

Page 2, Title Page: The year needs to be changed to 2001.

Page 11, 2.3 Water Quality Standards, quoted paragraph, 6c: Exponents are needed for 10⁻⁶ and 10⁻⁵.

Page 13, 2.5.1 Environmental Fate: The third sentence concerning the fipronil residues in the upper 15cm of the soil is repeated with a different reference source in the next to last sentence.

Page 16, Figure 2: The “allowed” line is shown incorrectly. It should intersect the loading curve.

Response:

2. EPA appreciates the comment and has revised the TMDL as appropriate.

Page 2: Corrected.

Page 11: Corrected.

Page 13: Both citations are correct. EPA has revised the document to reflect such.

Page 16: EPA appreciates the comment. This is an artifact from copying the graphic from Excel to Word. It has been corrected.

